UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/517,032	12/07/2004	Sergio Capurro	BA-22902	2851		
R Neil Sudol	7590 08/28/200	8	EXAMINER			
Coleman Sudol		YABUT, DIANE D				
714 Colorado A Bridgeport, CT			ART UNIT	PAPER NUMBER		
<b>.</b> .			3734			
			MAIL DATE	DELIVERY MODE		
			08/28/2008	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Communication			Application No	ation No. Applicant(s)				
			10/517,032		CAPURRO, SERGIO			
Office Action Summary			Examiner		Art Unit			
			DIANE YABUT		3734			
Period fo	The MAILING DATE of this commur or Reply	nication appea	ars on the cove	r sheet with the c	orrespondence ad	ddress		
WHIC - Exter after - If NC - Failu Any r	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MASSISSISSISSISSISSISSISSISSISSISSISSISSI	MAILING DAT s of 37 CFR 1.136( munication. tatutory period will v will, by statute, ca	TE OF THIS CO (a). In no event, how apply and will expire ause the application	OMMUNICATION vever, may a reply be time. SIX (6) MONTHS from to become ABANDONE	N. nely filed the mailing date of this of (35 U.S.C. § 133).			
Status								
1) 又	Responsive to communication(s) file	ed on <i>07/14/2</i>	2008.					
· · · · · · · · · · · · · · · · · · ·			<u>-555</u> . .ction is non-fir	nal.				
3)	Since this application is in condition	<i>,</i> —			secution as to the	e merits is		
- ,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)🛛	☑ Claim(s) <u>1-13</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
6)🛛	S)⊠ Claim(s) <u>1-13</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8)	Claim(s) are subject to restrict	ction and/or e	election require	ement.				
Applicati	on Papers							
9)	The specification is objected to by th	e Examiner.						
10)	The drawing(s) filed on is/are	: а) 🗌 ассер	oted or b)□ ob	jected to by the E	Examiner.			
•	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including	g the correction	n is required if th	ne drawing(s) is obj	ected to. See 37 C	FR 1.121(d).		
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	ınder 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
2)  Notic 3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (I nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	PTO-948)	4) 5) 6)	Interview Summary Paper No(s)/Mail Da Notice of Informal P Other:	nte			

Art Unit: 3734

### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/14/2008 has been entered.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-2, 4-6, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Melzer** (U.S. Patent No. **5,389,103**) in view of **Villegas** (U.S. Patent No. **2,581,564**).

<u>Claims 1-2 and 4-6</u>: Melzer discloses an atraumatic surgical needle having two tissue penetrating and beveled needle tips **5** and comprising a tubular metal shaft having a hollow bore **35**, the shaft having a central portion that is equipped with a hole **36** on one

Art Unit: 3734

wall of the hollow shaft through which emerges a surgical thread that is anchored inside the needle by a knot (Figures 5-6, col. 6, lines 43-53).

Melzer discloses the claimed device except for the shaft being hollow from tip to tip with at least one of the tips being open and the external surface being cylindrical from tip to tip.

Villegas teaches a wholly tubular or cylindrical and hollow needle **10** (Figures 1-2). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Melzer by having a shaft being hollow from tip to tip, as taught by Villegas, to further anchor the thread and so that the thread may be threaded, unthreaded and sterilized repeatedly within the needle (col. 2, lines 1-4).

<u>Claim 13</u>: Although neither Melzer nor Villegas expressly disclose the surgical thread being fixed by means of two or more anchoring techniques, it would have been obvious to one of ordinary skill in the art to further secure the thread to the needle by using more than one anchoring technique, as a person of ordinary skill would recognize that doing so would strengthen the connection between the thread and the needle.

- 4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Melzer** (U.S. Patent No. **5,389,103**) in view of **Villegas** (U.S. Patent No. **2,581,564**), as applied to claim 1 above, and further in view of **Scirica** (U.S. Patent No. **5,908,428**).
- <u>Claim 3</u>: Melzer and Villegas disclose the claimed device except for the surgical thread being anchored by pinching the needle.

Scirica teaches a needle wherein one end of the surgical thread **34** is inserted into the hole **212** of the needle and is anchored by pinching the needle (Figure 7 and col. 10, lines 21-26). It would have been obvious to one of ordinary skill in the art at the time of invention to anchor the surgical thread by pinching the needle, as taught by Scirica et al., to Villegas to effectively secure the thread simply by compression and eliminating the need for another securing mechanism.

5. Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Melzer (U.S. Patent No. 5,389,103) in view of Villegas (U.S. Patent No. 2,581,564), as applied to claim 1 above, and further in view of Coplan (U.S. Patent No. 3,918,455).

Claims 7-11: Melzer and Villegas disclose the claimed device, including an atraumatic surgical needle with one end of the surgical thread being inserted into the hole and being anchored inside the atraumatic two-tipped needle, except for being anchored by means of a scotch, a solid bar or a portion of tube, made of metal or plastic, the caliber of which is determined by the diameter of the needle, which is pushed down inside the needle from one of the two ends.

Coplan teaches a surgical thread, emerging from one end of the needle, being inserted and anchored, or fixed, in a hole in one end of a scotch **34**, a solid bar or a portion of tube, made of metal or plastic, the caliber of which is determined by the diameter of the needle, which is pushed down inside the needle from one of the two ends (Figure 4, col. 4, lines 55-63 and col. 6, lines 60-62). Coplan teaches that the use of the scotch **34** for a suture-needle combination reduces trauma at the site of tissue

Art Unit: 3734

penetration and reduces hazard of suture tear-out (col. 1, lines 60-68). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Melzer and Villegas by providing a scotch, which is pushed down inside the needle from one of two ends, as taught by Coplan, in order to reduce trauma at the site of tissue penetration and hazard of suture tear-out.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Melzer** (U.S. Patent No. **5,389,103**) in view of **Villegas** (U.S. Patent No. **2,581,564**), as applied to claim 1 above, and further in view of **Borst** (U.S. Pub. No. **20040260145**).

<u>Claim 12</u>: Melzer and Villegas disclose the claimed device, including a surgical thread being inserted into an atraumatic two-tipped needle, except for the thread being fixed between the coils of a tiny spring.

Borst teaches a suture being fixed between the coils of a tiny spring (page 11, paragraph 132). It would have been obvious to one of ordinary skill in the art to fix a suture between the coils of a tiny spring, as taught by Borst, to Melzer and Villegas since it was known in the art that springs are used as flexible retaining means for sutures, threads, and cords.

# Response to Arguments

7. Applicant's arguments filed 07/14/2008 have been fully considered but they are not persuasive.

Art Unit: 3734

8. Applicant argues that the needle of Melzer is not an atraumatic needle.

However, the examiner asserts that the sharp needle tips **5** may prevent tearing in tissue, and therefore is considered atraumatic to some degree.

9. In response to applicant's argument that it would not occur to one of ordinary skill in the art to combine Melzer and Villegas, since Melzer is a stitching needle with two tips and Villegas is a single-tipped surgical needle, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. As maintained above, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Melzer by having a shaft being hollow from tip to tip, as taught by Villegas, to further anchor the thread and so that the thread may be threaded, unthreaded and sterilized repeatedly within the needle (col. 2, lines 1-4).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIANE YABUT whose telephone number is (571)272-6831. The examiner can normally be reached on M-F: 9AM-4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3734

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diane Yabut/ Examiner, Art Unit 3734

/Todd E Manahan/ Supervisory Patent Examiner, Art Unit 3731